Nissin
DIGITAL

SPEEDLITE Di622

for Canon EOS digital SLR cameras
for Nikon digital SLR cameras

INSTRUCTION MANUAL

Nissin Speedlite Di622 is developed for digital SLR cameras with the latest TTL flash control technology.

Type C is
for Canon EOS digital SLR cameras,
model 300D, 350D, 400D, 10D, 20D, 30D, and 5D .
It works automatically with E-TTL II and E-TTL auto-flash system.

Type N is
for Nikon digital SLR cameras, model D40, D40x, D50, D70, D70s, D80, and D200.
It works automatically with i-TTL auto-flash system.

Attach Di622 to your camera, and then almost all jobs are controlled by the camera for the most proper exposure.

Read this instruction manual and refer your camera owner's manual to enjoy flash photography.

Nissin
Nissin Japan Ltd., Tokyo
http://www.nissin-japan.com

Nissin Marketing Ltd., Hong Kong

⚠ WARNING

This sign refers the danger or serious damage.

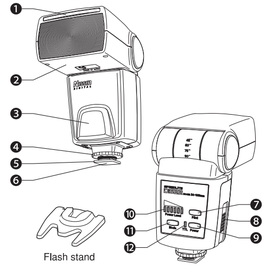
- The flash unit contains high voltage electric parts. Do not try to open or repair the flash unit. Return it back to the repair service station or the store you bought it.
- Do not touch the inside parts from the opening when the unit was dropped and broken.
- Do not fire the flash to the eye at short distance. It may damage the eye. When taking flash picture especially toward a baby, keep the flash unit at least 1 meter (3.3feet) away from the subject.
- Do not use the flash unit in the flammable gas, chemicals or such liquids. I may cause fire or electric shock.

⚠ CAUTIONS

This sign refers the damage or defect.

- Do not leave or store the flash unit in the temperature over 40°C, such like in the automobile.
- The flash unit is not water resistance. Keep the unit away from rain, snow and humidity.
- Do not use benzene, thinner or other alcoholic agents to clean the unit.
- Do not use this flash with the cameras which is not listed in this instruction manual, otherwise it may damage the camera's circuitry.
- Remove the batteries when not in use for a longer period of time.

■ Nomenclature



❶ Light diffusing panel / Fill-in reflector
❷ Flash head
❸ AF-assist light / wireless flash sensor
❹ Lock ring
❺ Mounting foot
❻ Hotshoe contacts
❼ Pilot lamp (Test flash button)
❽ Battery compartment door
❾ Power switch (Press button)
❿ Flash power level indication lamp (6 LED)
⓫ Mode select button (TTL⇔Manual⇔Slave)
⓬ TTL / Stand-by lamp

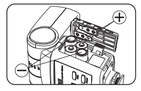
Accessories: Flash stand, Pouch

■ BASIC OPERATION

Inserting batteries

- Open the battery compartment door and insert 4 x size AA batteries as shown by the picture.

- Make sure the + and - battery contacts are correctly inserted as +/- symbol indicated at the battery compartment.



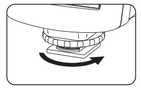
- Close the battery compartment door and slide it back in place.

NOTE

- Wrong insertion or using different size batteries may result damage on the flash unit.
- It is recommended to use all 4 batteries in same brand and type, and replace them all at the same time.

Mounting Di622 on the Camera

- Turn the lock ring to loosen it as shown in the picture.



- Slide the mounting foot of Di622 into the hotshoe of the camera.

- Turn the lock ring to opposite direction to tighten it.

Removing Di622 from the Camera

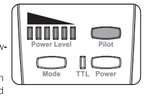
- Loosen the lock ring and slide the mounting foot of Di622 off the hotshoe of the camera.

NOTE

- Before mounting or removing Di622 into or from the camera, make sure to turn off the power switch of both Di622 and the camera.

Turn on the flash unit

- Press the power switch for 2 seconds. 6 LED and Pilot lamp turn on and off showing the power switch is turned on.



- In a few seconds, both Pilot lamp (Green) and Stand-by lamp (Red) turn on. Di622 is ready to shoot.
- For a test flash, press the pilot lamp. When using the test flash as an open flash, please note that the reference guide number in this case is G.No.10 (ISO 100 at 35mm position).
- To turn off the flash unit manually, press the power switch for 3 seconds.

Di622 has energy saving double power off function.

To save battery energy and avoid the battery leakage, the power is automatically turned off (to stand-by mode), both in TTL mode & Power ratio mode, in about 30 seconds of idle use. (When Di622 is placed on the camera, it will turn to stand-by mode after 5sec. approx. when the camera has been turned off or turned to stand by mode.)
While Di622 is in the stand-by mode a pilot lamp blinks every 5 seconds showing the flash unit is in stand-by mode.
To turn on Di622 again, press the camera's shutter button halfway or press any button of the flash unit.
In case Di622 is not in use over 5 minutes, the unit is completely turned off and shut out the current leakage from the batteries.
To turn on Di622 again, take the first step of turning the flash unit on.
In case of using Di622 as a slave flash (at slave mode*), Di622 will not go into the stand-by mode. It will however automatically turn off when not used over 60 minutes.
*Slave mode : Refer instruction below.

Shooting Di622 automatically

Canon cameras;

[**P**](Program), [□](Full Auto), [**Av**](Aperture priority), [**Tv**](Shutter priority) or [**M**](Manual); and/or

Nikon cameras;

[**P**](Program), [AUTO](Full Auto), [**A**](Aperture priority), [**S**](Shutter priority) or [**M**](Manual);

In all camera's shooting mode listed above, Di622 will fully work in TTL (**ETTL**, **ETTL-II** for Canon, and **iTTL** for Nikon) automatic-flash system.

- Set Di622 to the camera's hotshoe and turn on the power switch.
- Di622 is automatically set for the camera's TTL mode when ready lamp lights up.
- Press the shutter button of your camera halfway to focus the subject.
- Shutter speed, aperture and flash mark (ϟ) are indicated in camera's view finder.
- Take the picture. Di622 is fired and the result is immediately shown on the camera's LCD display.
- When you change the focal length, Di622 responds without delay and immediately sets its zoom setting position to match the lens focal length you selected.
- The flash illumination coverage of Di622 responds to the lens focal length of 24mm to 105mm (35mm camera standard).

Set the camera's shooting mode, select focal length and take pictures with Di622 on your camera.
Di622 is a supplement to help your taking a creative and live picture. Almost all jobs are automatically done by the camera and you just control the camera only. You do not need to control Di622 at all.

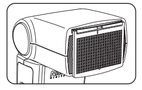
Mode		Shutter Speed	Aperture Setting	Control on the camera
Canon	Nikon			
[□]	[AUTO]	Automatic	Automatic	Automatic
[**P**]	[**P**]	Automatic	Automatic	Automatic
[**Tv**]	[**S**]	Manual	Automatic	Any available shutter speed can be set.
[**Av**]	[**A**]	Automatic	Manual	Any available f-stop can be set.
[**M**]	[**M**]	Manual	Manual	Any shutter speed / f-stop combination be set.

■ JOY OF FLASH PHTOGRAPHY

Fill-in flash and Light diffusing panel

For short distance or portrait flash photography, we wish if the light is not too sharp or too strong to the subject. Use fill-in reflector flash or diffuse the light.

- For portrait photography, pull out the light diffusing panel and place it over the flash window as shown in the picture. The diffusing panel makes the flash light soften and creates a lively color effect on the subject.



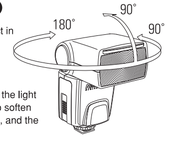
- If the subject is close(within 2 meter), turn the flash head 90° upward and pull out the fill-in reflector as shown in the picture.

- Take picture as usual. A blink of fill-in flash freshens up the subject in natural image.
- This technology is also useful to eliminate the shadow on the subject under the tree.

- Since the light diffusing panel expands the lighting area, it covers the range of 16mm focal length lens.

Bounce Lighting

When lighting a subject in front of the wall, an unnecessary sharp shadow on the wall results the picture disappointed. Bounce the light off the ceiling or wall to soften the light on the subject, and the shadow fade out.



- Turn the flash head up. It turns upward to 45° >60° >75° >90°.
- Or tilt the flash head sideway to left >30° >60° >90°or to right >30° >60° >90° >120° >150° >180°
- Or mixing it upward/sideway, you can set it at multiple directions as shown.
- When the flash head stays at turning or tilting position, the zoom setting position of Di622 is automatically set at the position for 50mm focal length lens.
- The wall or ceiling in this case should be flat surface and white color is preferable. Colored ceiling or wall may reflect its color on the subject.

AF assist light emitter

Under the low light condition, in the dark place, AF assist light will automatically emitted the infrared beam and illuminate the subject, so that the camera can easily focus the subject in darkness. The infrared beam is however not shown in the picture.

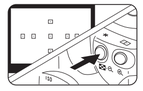
Flash Power Lock

When the back ground of the main subject is too bright, the camera's exposure reading system adjusts the flash light intensity for such back ground condition and it result the main subject underexposed. Or in case the main subject is not placed in the center of the viewfinder, flash picture may result the aimed subject under or over exposure.

You can lock the correct flash exposure for the aimed subject in such a condition. This flash exposure pre-set remains locked in, even if you change the aperture or zoom the lens in and out. This mode can only be set on the camera.

With **Canon** cameras; **FE lock**

- Focus the subject.
- Aim the viewfinder center over the main subject and press [✱] button on the camera (or [**FEL**] button on some cameras).



- Pre-flash is fired to pre-set the correct light amount for the main subject.
Remarks: FEL only work on P, TV, AV, M & A-Dep mode.

With **Nikon** cameras; **Fv lock**

- Set the Fv lock mode at the menu on your camera.
- Focus the subject.
- Aim the viewfinder center over the main subject and press [**AE-L**] button on the camera (or [**AF-L**] button on some cameras).

- Set the picture frame as you desire and release the shutter.
- Pre-flash is fired to pre-set the correct light amount for the main subject.

For Nikon Version only

Following functions are available on Nikon cameras. Refer to camera owner's manual for details.

Slow shutter synchronization

The flash is controlled at a slow shutter speed to the correct exposure for both the main subject and back ground in low light conditions or at night.

SLOW

Red-eye reduction

To prevent the subject's eyes from appearing read, Di622 fires three controlled flash just before the picture is taken. Red-eye reduction can be combined with slow sync.

SLOW

Rear curtain synchronization

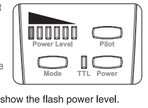
In rear-curtain sync., the flash fires just before the rear curtain close. By using this function at slow shutter speeds, a moving subject will appear with such moving marks behind.

REAR²

Manual Exposure Flash

In some occasion, or for special expression, you may need your own flash exposure instead of automatic controlled exposure. You can set Di622 for non-automatic flash mode, and select the desired flash power from 6 different levels

- When the flash unit is turned on, it is automatically set for TTL (E-TTL II / E-TTL for Canon, or iTTL for Nikon) automatic flash mode.
- Press the mode select button.
- TTL lamp turns off and orange colored LED turns on as shown in the picture.



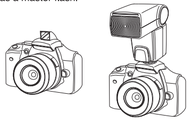
- 6 orange colored LEDs show the flash power level.
- You can select the power, from the left to right, 1/1(full) - 1/2 - 1/4 - 1/8 - 1/16 -1/32.
- Set the camera shooting mode to either [**AV**](Canon), [**A**](Nikon), or [**M**].
- Select your desired F-stop and/or shutter speed. Point the subject and press the shutter.

Wireless Remote Flash

Di622 has a wireless remote flash system as a slave unit.
You can enjoy creative flash photography with multiple lightings from the various directions.
Di622 synchronizes to TTL flash produced by the master flash (either Camera's built-in flash, Di622 or camera manufactures' original flash) on the camera. Please make sure the master flash is set at TTL flash mode.

■ Setting master flash:

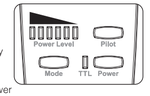
Place the master flash on the camera and switch it on. Or set the camera for flash mode to always fire the built-in flash as a master flash.



■ Setting slave flash Di622:

Switch Di622 on and while the ready lamp is on, press the mode button for 3 sec., the 1st LED of the Flash power indication lamp starts blinking every 1 sec., showing the mode is switched to Slave mode.

- Continue to press the mode button and select manual exposure power at any level you required. The power is set in 6 levels from the full power (left side) to the 1/32nd power (right side) Position TTL does not work for salve function.



- Set slave flash at any place and direct the flash head as you desire. Slave sensor in the slave flash is to face the camera.
- Use the shoe stand included. Place Di622 on to the shoe stand and place it either on the flat place or on the tripod by the screw.

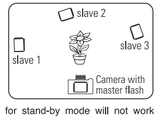
NOTE

- Metal type accessory shoe is not recommended since it may give electric damage on the electrical contact of the flash hotshoe.

■ Shooting the subject:

Set the camera for flash shooting mode. Point the subject and shoot.
The slave flash will synchronize to the master flash and gives additional lighting from the different direction you desired.

To reset the flash unit to the default mode, press the mode button for 3 sec., and Di622 is set at default(TTL) mode.



Energy saving system for stand-by mode will not work when it's in slave mode.
Automatic shut off function is however effect.
It automatically turns-off when not in use over 60 minutes.

The zoom setting position is automatically set for the focal length of 35mm while using Di622 as a slave unit.

■ SPECIFICATIONS

Usable cameras	Canon EOS digital SLR cameras	Nikon iTTL digital SLR cameras
Guide No.	44/144 at 105mm focal length (ISO 100 m/ft)	
Illumination coverage	24-105mm (16mm with diffuse panel) (Automatically set for the lens focal length)	
Power source	4 x size AA batteries (Size AA Ni-MH or lithium batteries usable)	
Battery life	200-1500 flashes according to the mode (with alkaline batteries)	
Energy Saving	Come to Stand-by mode in 30 sec., and Power off in 5 minutes after the power on or the last use of flash unit.	
Recycle time	5 sec. with fresh alkaline batteries	
Flash Exposure	Automatic exposure	
	E-TTL / E-TTL II	iTTL
Flash Power Lock	**FE lock** With [FEL] or [✱] button on EOS cameras	**Fv lock** With [AE-L] or [AF-L] button on the camera
AF assist light	Effective range of approx. 0.7 to 6m / 2.3 to 20 ft.	
Color Temperature	5600 K°	
Flash Duration	1/800 (full power flash) sec. 1/800-1/20,000(controlled flash) sec.	
Wireless Flash	Slave function with 6 power level (See guide number table below)	
Dimensions	77(W) x 130(H) x103(D) mm / 3.0(W) x 5.1(H) x 4.0(D) inches	
Weight	315 g	

■ Guide Number table

Guide No. at manual exposure mode (ISO 100 in meters/feet)

Zooming Position	Flash Power Level					
	Full	1/2	1/4	1/8	1/16	1/32
24mm	25/82	18/58	12.7/42	9/29	6.4/21	4.5/15
28mm	28/92	20/65	14/46	10/33	7/23	5/16
35mm	32/105	22/74	16/51	11/37	7.8/26	5.5/18
50mm	35/115	25/82	18/25	12.7/42	9/29	6.4/21
70mm	38/125	27/88	19/63	13.5/44	9.5/31	6.7/22
85mm	41/134	29/95	20/65	14/46	10/33	7/23
105mm	44/144	31/102	22/74	16/52	11/37	8/26

■ TROUBLE SHOOTING

The flash unit does not start charging.

- Batteries are not correctly installed
  >>> Install batteries to correct direction.
- Batteries are exhausted
  >>> Replace the batteries if the recycle time beyond 30 sec.

The flash unit does not fire.

- The flash unit is not firmly clipped on the camera
  >>> Mount the flash unit firmly on the camera's hot shoe.
- The flash unit is automatically powered off
  >>> Turn on the switch again.

The flash picture is overexposed or underexposed.

- A reflective object or strong lighting near the subject
  >>> Use FE or Fv lock.
- The unit is set for manual exposure mode
  >>> Set to TTL mode or other power level.

CAUTIONS :
In case of the following reason of the defect, it may void the warrantee. Please refer the respective warrantee condition for details which depend on the country by country.

1. The product is not used in accordance with the instruction of the owner's manual.
2. The product is repaired or modified by the one who is not an authorized repair service.
3. When the products is used with the cameras not applicable, lens, adaptors or such accessories produced by the third party.
4. Fault or defect caused by fire, earthquake, flood, public pollution and such natural accident.
5. In case that the product is stored in dust, moisture, extremely high temperature or such poor condition.
6. Scratch, blemish, crush or worn out by a violently use or treatment.
7. Guarantee card without name of place purchased or date of purchase stamped, or no guarantee card.